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applying a belt structure to the carcass structure at a circumferentially-external position thereof;

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applying a tread band to the belt structure at a circumferentially-external position thereof;

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applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and

vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one first carcass ply, comprising the steps of:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions,

the crown portion of each deposition section being arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, and the side portions of each deposition section each being partly overlapped with a side portion of at least one consecutive deposition section.

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41. (once amended) The method of claim 39, wherein mutual overlapping of the side portions of the deposition sections progressively decreases starting from a maximum value at radially-inner ends of the side portions until a zero value is reached at transition regions between the side portions and the crown portion.

42. (once amended) The method of claim 39, wherein the side portions in mutual-overlapping relationship are joined to each other at a bending end region where the at least one strip element is folded upon itself.

43. (once amended) The method of claim 39, wherein each deposition section is sequentially laid down onto the toroidal support according to a circumferential distribution pitch corresponding to a width of the at least one strip element.

44. (once amended) The method of claim 39, wherein each deposition section is sequentially laid down onto the toroidal support according to a circumferential distribution pitch corresponding to a multiple of a width of the at least one strip element.

45. (once amended) The method of claim 39, wherein formation of the at least one first carcass ply further comprises the step of pressing the at least one strip element at the side portions of the deposition sections to define regions of greater width close to radially-inner circumferential edges of the carcass structure.

46. (once amended) A method of making a tire, comprising the steps of:

making a carcass structure;

applying a belt structure to the carcass structure at a circumferentially-external position thereof;

applying a tread band to the belt structure at a circumferentially-external position thereof;

applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and

vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one carcass ply, comprising the steps of:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions,

the crown portion of each deposition section being arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, and the side portions of each deposition section each being partly overlapped with a side portion of at least one consecutive deposition section,

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wherein formation of the at least one carcass ply further comprises the step of pressing the at least one strip element at the side portions of the deposition sections to define regions of greater width close to radially-inner circumferential edges of the carcass structure, and

wherein the pressing step is carried out on the at least one strip element during the deposition step by exerting a pressing action on a section of the at least one strip element before that section is deposited onto the toroidal support.

47. (once amended) The method of claim 45, wherein concurrently with the pressing step, the thread elements comprised within the at least one strip element are mutually moved apart.

48. (once amended) The method of claim 39, wherein during the deposition step, at least one deposition section comprising an initial or leading end of the at least one strip element is retained on the toroidal support by a suction action produced through the toroidal support.

49. (once amended) The method of claim 39, wherein depositing each strip element onto a toroidal support comprises the steps of:

guiding the strip element on a distributor element movable about the profile in transverse section of the toroidal support;

translating the distributor element substantially radially away from the geometric axis of rotation of the toroidal support to form a first side portion of the deposition section of the strip element;

C2 rotating the toroidal support relative to the distributor element according to an angular pitch corresponding to one-half of a distribution pitch of the deposition section, concurrently with formation of the first side portion;

translating the distributor element substantially in a direction parallel to the geometric axis of rotation of the toroidal support to form the crown portion of the deposition section of the strip element;

translating the distributor element substantially radially close to the geometric axis of rotation of the toroidal support to form a second side portion of the deposition section of the strip element; and

rotating the toroidal support relative to the distributor element according to the angular pitch, concurrently with formation of the second side portion.

C3 52. (once amended) The method of claim 51, wherein the retaining element is axially disengaged from the bending region after beginning formation of the crown portion of the deposition section being deposited.

C4 55. (once amended) The method of claim 39, further comprising the step of applying at least one inextensible annular structure to an area close to inner circumferential edges of the at least one first carcass ply.

C5 57. (once amended) The method of claim 39, further comprising the step of forming a second carcass ply in a similar manner to formation of the at least one first carcass ply.

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67. (once amended) The method of claim 39, wherein the step of applying the tread band comprises circumferentially winding at least one continuous sheet of raw elastomeric material about the belt structure in a plurality of radially-superposed coils.

68. (once amended) The method of claim 67, wherein the at least one continuous sheet of elastomeric material is produced during winding of the at least one continuous sheet of raw elastomeric material about the belt structure.

69. (once amended) The method of claim 67, further comprising the step of progressively reducing a width of the at least one sheet of elastomeric material concurrently with winding each coil about the belt structure.

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71. (once amended) The method of claim 70, wherein making each sidewall comprises the steps of:

injecting a first elastomeric material into a first cavity defined in the mold to form a radially-outer portion of the sidewall;

defining a second cavity in the mold, partly delimited by the radially-outer portion of the sidewall; and

injecting a second elastomeric material into the second cavity of the mold to define a radially-inner portion of the sidewall.

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72. (once amended) The method of claim 39, wherein formation of the at least one first carcass ply is preceded by the step of coating the toroidal support with at least one air-proof layer or liner of elastomeric material.

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75. (once amended) The method of claim 39, wherein during the vulcanization step, a step of stretching the at least one first carcass ply and the belt structure is carried out for achieving an expansion of the tire of a linear amount between 2% and 5%.

Please add new claims 76-80, as follows:

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--76. (new) A method of making a tire, comprising the steps of:  
making a carcass structure;  
applying a belt structure to the carcass structure at a circumferentially-external position thereof;  
applying a tread band to the belt structure at a circumferentially-external position thereof;  
applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions;  
applying at least one inextensible annular structure to an area close to inner circumferential edges of at least one carcass ply; and  
vulcanizing the tire;  
wherein the step of making the carcass structure involves formation of the at least one carcass ply, comprising the steps of:

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preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

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depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions;

wherein the crown portion of each deposition section is arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, wherein the side portions of each deposition section are each partly overlapped with a side portion of at least one consecutive deposition section, and wherein the formation of the at least one carcass ply occurs before the step of applying the at least one inextensible annular structure to the area close to the inner circumferential edges of the at least one carcass ply.

77. (new) A method of making a tire, comprising the steps of:

making a carcass structure;

applying a belt structure to the carcass structure at a circumferentially-external position thereof;

applying a tread band to the belt structure at a circumferentially-external position thereof;

applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and



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vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one carcass ply, comprising the steps of:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

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depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions;

wherein the crown portion of each deposition section is arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, wherein the side portions of each deposition section are each partly overlapped with a side portion of at least one consecutive deposition section, and wherein the at least one continuous strip element is deposited onto an exterior surface of the toroidal support.

78. (new) A method of making a tire, comprising the steps of:

making a carcass structure;

applying a belt structure to the carcass structure at a circumferentially-external position thereof;

applying a tread band to the belt structure at a circumferentially-external position thereof;

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applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and

vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one first carcass ply, comprising the steps of:

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preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions;

wherein the crown portion of each deposition section is arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, wherein the side portions of each deposition section are each partly overlapped with a side portion of at least one consecutive deposition section, and wherein crown portions of consecutive deposition sections are parallel to each other.

79. (new) A method of making a tire, comprising the steps of:  
making a carcass structure;

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applying a belt structure to the carcass structure at a circumferentially-external position thereof;

applying a tread band to the belt structure at a circumferentially-external position thereof;

applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and

vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one carcass ply, comprising the steps of:

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preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions;

wherein the crown portion of each deposition section is arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, wherein the side portions of each deposition section are each partly overlapped with a side portion of at least one consecutive deposition section, and wherein the crown section of each carcass ply comprises a single layer of the deposition sections.

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80. (new) A method of making a tire, comprising the steps of:

making a carcass structure;

applying a belt structure to the carcass structure at a circumferentially-external position thereof;

applying a tread band to the belt structure at a circumferentially-external position thereof;

applying at least one pair of sidewalls to the carcass structure at laterally-opposite positions; and

vulcanizing the tire;

wherein the step of making the carcass structure involves formation of at least one carcass ply, comprising the steps of:

preparing at least one continuous strip element comprising a plurality of longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomeric material; and

depositing the at least one continuous strip element onto a toroidal support in alternating deposition sections, each extending in a substantially U-shaped conformation about a profile in transverse section of the toroidal support to define two side portions, the side portions substantially extending in planes orthogonal to a geometric axis of rotation of the toroidal support at mutually-spaced-apart positions in an axial direction, and a crown portion extending in a radially-external position between the side portions;

wherein the crown portion of each deposition section is arranged consecutively in side-by-side relationship along a circumferential extension of the toroidal support, and wherein, for consecutive deposition sections, a side portion of a second-deposited section disposed farther